

B1

Production of casting molds comprises depositing particulate material on support, applying binder and hardener to form solidified structure in selected region, and removing solidified structure

Patent number: DE19853834

Publication date: 2000-05-31

Inventor: HOECHSMANN RAINER (DE); KUDERNATSCH ALEXANDER (DE); EDERER INGO (DE)

Applicant: HOECHSMANN RAINER (DE); KUDERNATSCH ALEXANDER (DE); EDERER INGO (DE)

Classification:

- **international:** B22C7/00

- **european:** B22C9/00, B22C9/10

Application number: DE19981053834 19981121

Priority number(s): DE19981053834 19981121

Abstract of DE19853834

Casting molds or cores are produced by depositing bulky particulate material layer on a building material support, applying a binder and hardener to form a solidified structure in a selected region, and removing the solidified structure from the non-solidified components of the particulate material.

Production of casting molds or cores comprises: (a) depositing a layer of a bulky particulate material in a region on a building material support; (b) applying a binder material to the particulate material layer; (c) applying a hardener in the form of liquid drops to the particulate layer and binder in a selected partial region so that the binder and particulate material form a solidified structure; (d) producing further layers by repeating steps (a) to (c), in which a further layer of particulate material is deposited on a previous layer and the hardener is applied in another partial region than with the previous layer; and (e) removing the solidified structure from the non-solidified components of the particulate material. An independent claim is also included for an apparatus for producing casting molds or cores comprising a building material support (1); an application device (2); a particulate material dosing device (3); and an atomizer.